

WHAT IS CLAIMED IS:

1. A method for creating and assigning Temporary Moving Group Identifier (TMGI), comprising the steps of:

5 a) sending a message to a serving GPRS Supporting Node (SGSN) when an UE joining a Multimedia Broadcast/Multicast Service (MBMS) group;

b) if a MBMS TMGI has been added into the SGSN records, the SGSN directly replying to the UE with the TMGI corresponding to the service;

10 c) if there is no record for this service in the SGSN, the SGSN sending a message to a Gateway GPRS Supporting Node (GGSN), and if the GGSN has the TMGI corresponding to this service, the GGSN sending it to the SGSN;

d) if there is no record for this service in the GGSN, the GGSN creating a TMGI for the MBMS service and transfers it to the SGSN;

15 e) the SGSN sending a TMGI received from the GGSN to a radio network controller (RNC);

f) the RNC transmitting the TMGI to the UE; and

g) the UE receiving signal from the RNC by using the TMGI.

2. The method as claimed in claim 1, further comprising the steps of: after the RNC receiving TMGI,

20 h) forwarding the message to the SGSN.

3. The method as claimed in claim 2, the RNC adds 1 to the number of the service's users.

4. The method as claimed in claim 2, the TMGI is included in a initial direct transmission of RNC message.

25 5. The method as claimed in claim 1, the creating of the TMGI comprising the steps of:

creating a temporary identifier;

obtaining a GGSN identifier;

associating the GGSN identifier with the temporary identifier.

30 6. A method for creating and assigning Temporary Moving Group Identifier (TMGI), comprising the steps of:

a) sending a message to a serving GPRS Supporting Node (SGSN) when an UE joining a Multimedia Broadcast/Multicast Service (MBMS) group;

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b) if a MBMS TMGI corresponding to the service has been added to the SGSN records, the SGSN directly replying to the UE with the TMGI corresponding to the service;

5 c) if there is no record for this service in the SGSN, the SGSN sending a message including the newly created TMGI to a Gateway GPRS Supporting Node (GGSN), the GGSN then sending a TMGI corresponding to this service to the SGSN to replace the TMGI created by the SGSN;

d) if there is no record for this service in the GGSN, the GGSN saving the TMGI created by the SGSN for the MBMS service and mapping it with IP multicast address;

10 e) the SGSN sending the TMGI received from the GGSN to a RNC;

f) the RNC transmitting the TMGI to the UE; and

g) the UE receiving signal from the RNC by using the TMGI.

7. The method as claimed in claim 6, further comprising the steps of: after the RNC receiving TMGI,

15 h) forwarding the message to the SGSN.

8. The method as claimed in claim 7, the RNC adds 1 to the number of the service's users.

9. The method as claimed in claim 7, the TMGI is included in a initial direct transmission of RNC message.

20 10. The method as claimed in claim 6, the creating of the TMGI comprising the steps of:

creating a temporary identifier;

obtaining a GGSN identifier;

associating the GGSN identifier with the temporary identifier.

25 11. A method for creating and assigning Temporary Moving Group Identifier (TMGI), comprising the steps of:

a) sending a message to a serving GPRS Supporting Node (SGSN) when an UE joining a Multimedia Broadcast/Multicast Service (MBMS) group;

30 b) if a MBMS TMGI has been added to SGSN record, the SGSN directly replying to the UE with the TMGI corresponding to the service;

c) if there is no record for this service in the SGSN, the SGSN sending a message to a Gateway GPRS Supporting Node (GGSN) and then the GGSN sending a response to the SGSN;

35 d) the SGSN creating a TMGI for this service and responding to the UE with this TMGI;

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e) the SGSN sending a message to other SGSNs to notify them of the corresponding relation between the MBMS service and the TMGI;

f) the UE receiving signal from the RNC by using the TMGI.

5 12. The method as claimed in claim 11, further comprising the steps of: after the RNC receiving TMGI,

g) forwarding the message to the SGSN.

13. The method as claimed in claim 12, the RNC adds 1 to the number of the service's users.

10 14. The method as claimed in claim 12, the TMGI is included in a initial direct transmission of RNC message.

15. The method as claimed in claim 11, the corresponding relation between the TMGI and the MBMS service are notified to other SGSNs with the aid of a newly created message; and parameters of the message include a TMGI and an IP multicast address.